## **RAW SEQUENCE LISTING**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number:	10/010,7294
Source:	IFW16
Date Processed by STIC:	09/26/2005

## ENTERED



IFW16

RAW SEQUENCE LISTING DATE: 09/26/2005 PATENT APPLICATION: US/10/010,729A TIME: 10:00:00

Input Set : A:\1199-1-005CIP2 -SEQLIST.TXT
Output Set: N:\CRF4\09262005\J010729A.raw

```
4 <110> APPLICANT: Rodriguez, Moses
        Miller, David J.
 5
         Pease, Larry R.
 6
 8 <120> TITLE OF INVENTION: Human IgM Antibodies and Diagnostic and
 9
         Therapeutic Uses Thereof Particularly in the Central Nervous
10
         System
12 <130> FILE REFERENCE: 1199-1-005CIP2
14 <140> CURRENT APPLICATION NUMBER: 10/010,729A
15 <141> CURRENT FILING DATE: 2001-11-13
17 <150> PRIOR APPLICATION NUMBER: 09/730,473
18 <151> PRIOR FILING DATE: 2000-12-05
20 <150> PRIOR APPLICATION NUMBER: 09/580,787
21 <151> PRIOR FILING DATE: 2000-05-30
23 <150> PRIOR APPLICATION NUMBER: 09/322,862
24 <151> PRIOR FILING DATE: 1999-05-28
26 <150> PRIOR APPLICATION NUMBER: 08/779,784
27 <151> PRIOR FILING DATE: 1997-01-07
29 <150> PRIOR APPLICATION NUMBER: 08/692,084
30 <151> PRIOR FILING DATE: 1996-08-08
32 <150> PRIOR APPLICATION NUMBER: 08/236,520
33 <151> PRIOR FILING DATE: 1994-04-29
35 <160> NUMBER OF SEQ ID NOS: 80
37 <170> SOFTWARE: FastSEQ for Windows Version 4.0
39 <210> SEQ ID NO: 1
40 <211> LENGTH: 420
41 <212> TYPE: DNA
42 <213> ORGANISM: Mus musculus
44 <400> SEQUENCE: 1
45 atgggatgga gatggatett tetttteete etgteaggaa etgeaggtgt ecattgeeag 60
46 gttcagctgc agcagtctgg acctgagctg gtgaagcctg gggctttagt gaagatatcc 120
47 tgcaaggett etggttacae etteacaage tacgatataa aetgggtgaa geagaggeet 180
48 ggacagggac ttgagtggat tggatggatt tatcctggag atggtagtac taagtacaat 240
49 gagaaattca agggcaaggc cacactgact gcagacaaat cctccagcac agcctacatg 300
50 cageteagea geetgaette tgagaaetet geagtetatt tetgtgeaag aggggeeagg 360
51 ttctactggt acttcgatgt ctggggcgca gggaccacgg tcaccgtctc ctcagagagt 420
54 <210> SEQ ID NO: 2
55 <211> LENGTH: 395
56 <212> TYPE: DNA
57 <213> ORGANISM: Mus musculus
59 <400> SEQUENCE: 2
60 atggetgtet tggggetget ettetgeetg gtgacattee eaagetgtgt eetateeeag 60
61 gtgcagctga agcagtcagg acctggccta gtgcagccct cacaqaqcct qtccatcacc 120
62 tgcacagtct ctggtttctc attaactagc tatggtgtac actqqqttcq ccaqtctcca 180
```

Input Set : A:\1199-1-005CIP2 -SEQLIST.TXT
Output Set: N:\CRF4\09262005\J010729A.raw

63 ggaaagggtc tggagtggct gggagtgata tggagtggtg gaagcacaga ctataatgca 240 64 gctttcatat ccagactgag catcagcaag gacgcttcca agagccaagt tttctttaaa 300 65 atgaacagtc tqcacgctac atatattatt gtgccagaga ctacggtagt aggggggact 360 66 actggggtca aggaacctca gtcaccgtct cctca 395 68 <210> SEQ ID NO: 3 69 <211> LENGTH: 423 70 <212> TYPE: DNA 71 <213> ORGANISM: Mus musculus 73 <400> SEQUENCE: 3 74 atgaagttgt ggttaaactg ggtttttctt ttaacacttt tacatggtat ccagtgtgag 60 75 gtgaagetgg tggaatetgg tggaggeetg gtacageetg ggggttetet gagaetetee 120 76 tgtgcaactt ctgggttcac cttcagtgat ttctacatgg agtgggtccg ccagcctcca 180 77 gggaaqagac tggagtggat tgctgcaaqt agaaagaaag ctaatgatta taaaacagag 240 78 tacagtgcat ctgtgaaggg gcggttcacc gtctccagag acacttccca aagcatcctc 300 79 taccttcaga tgaatgccct gagagatgag gacactgcca tttattactg tgcaagagat 360 80 gcacggcagc tcgggctccc gtttgcttac tggggccaag ggactctggt cactgtctct 420 81 qca 423 83 <210> SEO ID NO: 4 84 <211> LENGTH: 384 85 <212> TYPE: DNA 86 <213> ORGANISM: Mus musculus 88 <400> SEOUENCE: 4 89 atggaatcac agactctggt cttcatatcc atactgctct ggttatatgg agctgatggg 60 90 aacattgtaa tgacccaatc tcccaaatcc atgtccatgt cagtaggaga gagggtcacc 120 91 ttgacctgca aggccagtga gaatgtggtt acttatgttt cctggtatca acagaaacca 180 92 gagcagtete etaaactget gatatacggg geatecaace ggtacactgg ggteecegat 240 93 cgcttcacag gcagtggatc tgcaacagat ttcactctga ccatcagcag tgtgcaggct 300 94 gaagacettg cagattatca etgtggacag ggttacaget atccgtacac gttecgaggg 360 95 gggaccaagc tggaaataaa acgg 97 <210> SEQ ID NO: 5 98 <211> LENGTH: 402 99 <212> TYPE: DNA 100 <213> ORGANISM: Mus musculus 102 <400> SEQUENCE: 5 103 atggacatga gggctcctgc acagattttt ggcttcttgt tgctcttgtt tcaaggtacc 60 104 agatgtgaca tccagatgac ccagtctcca tcctccttat ctgcctctct gggagaaaga 120 105 qtcaqtctca cttqtcqqqc aaqtcaqqac attqqtaqta qcttaaactq qcttcaqcaq 180 106 gaaccagatg gaactattaa acgcctgatc tacgccacat ccagtttaga ttctggtgtg 240 107 cccaaaaggt tcagtggcag taggtctggg tcagattatt ctctcaccat cagcagcctt 300 108 gagtetgaag attttgtaga etattaetgt etacaatatg etagttetee gtacaegtte 360 109 qqaqqqqqa ccaaqctqqa aataaaacqq qctqatqctt ca 402 111 <210> SEQ ID NO: 6 112 <211> LENGTH: 396 113 <212> TYPE: DNA 114 <213> ORGANISM: Mus musculus 116 <400> SEQUENCE: 6 117 atggagtcac agattcaggt ctttgtattc gtgtttctct ggttgtctgg tgttgacgga 60 118 gacattgtga tgacccagtc tcacaaattc atgtccactt cagtaggaga cagggtcagc 120 119 atcacctgca aggccagtca ggatgtgagt actgctgtag cctggtatca acagaaacca 180

Input Set : A:\1199-1-005CIP2 -SEQLIST.TXT
Output Set: N:\CRF4\09262005\J010729A.raw

120 ggacaatete etaaactact gatttacteg geatectace ggtacaetgg agteeetgat 240 121 cgcttcactg gcagtggatc tgggacggat ttcactttca ccatcagcag tgtgcaggct 300 122 gaagacctgg cagtttatta ctgtcagcaa cattatacta ctccqctcac gttcqqtgct 360 123 gggaccaggc tggagctgaa acgggctgat gcttca 396 125 <210> SEQ ID NO: 7 126 <211> LENGTH: 119 127 <212> TYPE: PRT 128 <213> ORGANISM: Homo sapiens 130 <220> FEATURE: 131 <221> NAME/KEY: VARIANT 132 <222> LOCATION: (50)...(50) 133 <223> OTHER INFORMATION: Xaa can be Val or Ile 135 <221> NAME/KEY: VARIANT 136 <222> LOCATION: (89)...(89) 137 <223> OTHER INFORMATION: Xaa can be Asp or Glu W--> 139 < 400 > 7140 Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg 141 1 142 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Ser 20 25 144 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val W--> 146 Ala Xaa Ile Ser Tyr Asp Gly Ser Arg Lys Tyr Tyr Ala Asp Ser Val 147 50 148 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr 149 65 70 75 150 Leu Gln Met Asn Ser Leu Thr Ala Xaa Asp Thr Ala Val Tyr Tyr Cys 85 90 152 Ala Lys Gly Val Thr Gly Ser Pro Thr Leu Asp Tyr Trp Gly Gln Gly 105 154 Thr Leu Val Thr Val Ser Ser 155 115 158 <210> SEQ ID NO: 8 159 <211> LENGTH: 357 160 <212> TYPE: DNA 161 <213> ORGANISM: Homo sapiens 163 <220> FEATURE: 164 <221> NAME/KEY: variation 165 <222> LOCATION: (27)...(27) 166 <223> OTHER INFORMATION: n is a or q 168 <221> NAME/KEY: variation 169 <222> LOCATION: (117)...(117) 170 <223> OTHER INFORMATION: n is g or a W--> 172 <400> 8 W--> 173 caggtgcagc tggtggagtc tgggggnggc gtggtccagc ctgggaggtc cctgagactc 60 174 tcctgtgcag cctctggatt caccttcagt agctctggca tgcactgggt ccgccangct 120 175 ccaggcaagg ggctggagtg ggtggcagtt atatcatatg atggaagtaa taaatactat 180 176 gcagactecg tgaagggccg atteaceate tecagagaea attecaagaa caegetgtat 240 177 ctgcaaatga acagcctgag agctgaggac acggctgtgt attactgtgc gaaagaggtg 300

Input Set : A:\1199-1-005CIP2 -SEQLIST.TXT
Output Set: N:\CRF4\09262005\J010729A.raw

178 actgctattc cctactttga ctactggggc cagggaaccc tggtcaccgt ctcctca 357 180 <210> SEQ ID NO: 9 181 <211> LENGTH: 114 182 <212> TYPE: PRT 183 <213> ORGANISM: Homo sapiens 185 <220> FEATURE: 186 <221> NAME/KEY: VARIANT 187 <222> LOCATION: (46)...(46) 188 <223> OTHER INFORMATION: Xaa is Arg or Lys 190 <221> NAME/KEY: VARIANT 191 <222> LOCATION: (90)...(90) 192 <223> OTHER INFORMATION: Xaa is Gly or Glu W--> 194 <400> 9 195 Gln Ser Val Leu Thr Gln Pro Pro Ser Val Ser Ala Ala Pro Gly Gln 10 197 Lys Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Asn Asn 198 25 W--> 199 Phe Val Ser Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Xaa Leu Leu 200 201 Ile Tyr Asp Ile Thr Lys Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser 202 203 Gly Ser Lys Ser Gly Thr Ser Ala Thr Leu Gly Ile Thr Gly Leu Gln 205 Thr Gly Asp Glu Ala Asp Tyr Tyr Cys Xaa Thr Trp Asp Ser Ser Leu 207 Ser Ala Val Val Phe Gly Gly Thr Lys Leu Thr Val Leu Gly Gln 208 100 105 209 Pro Lys 213 <210> SEQ ID NO: 10 214 <211> LENGTH: 342 215 <212> TYPE: DNA 216 <213> ORGANISM: Homo sapiens 218 <220> FEATURE: 219 <221> NAME/KEY: variation 220 <222> LOCATION: (137)...(137) 221 <223> OTHER INFORMATION: n is g or a 223 <221> NAME/KEY: variation 224 <222> LOCATION: (269) ... (269) 225 <223> OTHER INFORMATION: n is g or a W--> 227 <400> 10 228 cagtetgtgt tgacggagee geetteagtg tetgetgeee caggacagaa ggteaceate 60 229 teetgetetg gaageagete caacattgge aataattttg tateetggta eeageaacte 120 W--> 230 ccaggaacag cccccanact cctcatttat gacattacta agcgaccete agggatteet 180 231 gaccgattct ctggctccaa gtctggcacg tcagccaccc tgggcatcac cggactccag 240 232 actggggacg aggccgatta ttactgcgna acatgggata gcagcctgag tgctgtggta 300 233 ttcggcgggg ggaccaagct gaccgtccta ggtcagccca ag 235 <210> SEQ ID NO: 11 236 <211> LENGTH: 121 237 <212> TYPE: PRT

Input Set : A:\1199-1-005CIP2 -SEQLIST.TXT
Output Set: N:\CRF4\09262005\J010729A.raw

238 <213> ORGANISM: Homo sapiens 240 <400> SEQUENCE: 11 241 Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu 242 1 5 243 Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Tyr 244 20 25 245 Tyr Trp Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile 35 247 Gly Tyr Ile Tyr Tyr Ser Gly Ser Thr Asn Tyr Asn Pro Ser Leu Lys 248 249 Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser Leu 250 65 70 75 251 Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala 253 Arg Ser Ala Gln Gln Gln Leu Val Tyr Tyr Phe Asp Tyr Trp Gly Gln 254 100 105 255 Gly Thr Leu Val Thr Val Ser Ser Gly 256 115 259 <210> SEQ ID NO: 12 260 <211> LENGTH: 370 261 <212> TYPE: DNA 262 <213> ORGANISM: Homo sapiens 264 <400> SEQUENCE: 12 265 caggtgcagc tgcaggagtc gggcccagga ctggtgaagc cttcggagac cctgtccctc 60 266 acctgcactg tetetggtgg etecateagt agttactaet ggagetggat eeggeageee 120 267 ccagggaagg gactggagtg gattgggtat atctattaca gtgggagcac caactacaac 180 268 ccctccctca agagtcgagt caccatatca gtagacacgt ccaagaacab ccagttctcc 240 269 ctgaagctga gctctgtgac cgctgcggac acggccabcg tgtattactg tgcgaggtcg 300 270 gcacagcagc agctggtata ctacdtttga ctactggggc cagggaaccc tggtcaccgt 360 271 ctcctcaggg 273 <210> SEQ ID NO: 13 274 <211> LENGTH: 119 275 <212> TYPE: PRT 276 <213> ORGANISM: Homo sapiens 278 <400> SEQUENCE: 13 279 Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly 280 1 5 10 281 Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser 20 25 283 Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln 284 35 285 Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val 55 287 Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr 70 75 289 Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln 291 Tyr Tyr Ser Thr Pro Leu Thr Phe Gly Pro Gly Thr Lys Val Asp Ile 292 105

Input Set: A:\1199-1-005CIP2 -SEQLIST.TXT
Output Set: N:\CRF4\09262005\J010729A.raw

## Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:7; Xaa Pos. 80,89 Seq#:8; N Pos. 27,147 Seq#:9; Xaa Pos. 46,80 Seq#:10; N Pos. 137,269 VERIFICATION SUMMARYDATE: 09/26/2005PATENT APPLICATION: US/10/010,729ATIME: 10:00:01

Input Set : A:\1199-1-005CIP2 -SEQLIST.TXT
Output Set: N:\CRF4\09262005\J010729A.raw

- L:139 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:7
- L:146 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:48
- M:341 Repeated in SeqNo=7
- L:172 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:8
- L:173 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0
- M:341 Repeated in SeqNo=8
- L:194 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:9
- L:199 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:32
- M:341 Repeated in SeqNo=9
- L:227 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:10
- L:230 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:120
- M:341 Repeated in SeqNo=10
- L:994 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:53 L:1431 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (80) SEQUENCE: